Soldiers

Sacramento's Colonia Sacramento's

Story and Photos by Steve Harding

AYBE it's the big red crosses on the sides, or the rescue hoist in the door, or the huge waterfilled bucket dangling beneath. Maybe it's all three. But when the UH-60A Black Hawks of the California Army National Guard's 126th Medical Company arrive on the scene, they're always a welcome sight.

Based at Sacramento's Mather Field, the 126th is the California Army Guard's only air ambulance unit and one of just four high-priority air ambulance companies in the United States. Its 15 helicopters and 118 people augment the medevac "slice" of an infantry maneuver brigade or division. Though the 126th's soldiers have performed that mission more than once — most recently in Bosnia — it is their home-state firefighting and

search-and-rescue missions that have earned them the nickname "Sacramento's Saints."

"We're able to step up and help the people of our state because we have very capable people and aircraft," said the 126th's commander, MAJ Robert A. Spano. "Though state and local agencies field helicopters for both firefighting and search and rescue, we're often able to provide a higher level of help. And we're happy to do it."

On the Fire Line

Like many western states, California fights an annual battle against wildfire, and it's a war in which helicopters play a major role. They can attack fires directly, using large collapsible water containers known as

"Bambi buckets" and, once the buckets are removed, the aircraft can be used to insert teams of firefighters, move equipment and supplies, or evacuate the injured.

"For the firefighting mission we usually have several aircraft equipped with Bambi buckets, which the state provides for us," Spano said. "We can load the collapsed buckets into the back of the aircraft, carry them out to the fire scene, then deploy and fill them."

The buckets are normally filled from a water source near the fire — the hovering helicopter dips the bucket into a lake, river or canal, for example. If natural sources aren't available, the buckets can be filled from large, portable swimming-pool-like structures called "pumpkins." When full, the 660-gallon buckets weigh almost 5,500 pounds.

Though a single load of water might have little effect on a large wildfire, it can be tremendously useful against spot fires and when used in the "initial attack" phase, said 1LT Daniel Anderson, the 126th's training officer.

"Initial attack means that as soon as a fire is reported, we get out there with the bucket and try to put it out before it really gets going," he said. "We're often the first ones on the scene, and if we're lucky we can sometimes stop the fire before it spreads any further."

The 126th's Black Hawks are also

A 126th Black Hawk circles one of the many fires that erupted in California during the long summer 2000 fire season.



extremely useful in another phase of the war against fire: moving vital equipment and teams of firefighters from one area to another as the battle rages.

"The UH-60 was built to haul people and equipment," Anderson said, "and it's a job the California Department of Forestry really likes to use us for. That's partly because of the Black Hawk's performance, and partly because we can quickly reconfigure the aircraft from passenger transport to firefighting and back."

And there are obvious parallels between carrying firefighters and carrying troops in military operations, Anderson said.

"It's very similar. We've got people loaded down with equipment and strapped down in the back of the aircraft, and we need to get them to an LZ where the smoke is very thick or the terrain is so steep we can only put one wheel down. We're trying to get in and get out, because there's another sortie coming in right behind us. It's very much like any military operation," he said.

The third mission the 126th's



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aviators undertake during fire season — medical evacuation — is also a familiar one.

"We're an air-ambulance unit," Spano said. "It's what we do best. During fire season our medevac operations usually involve the recovery of injured firefighters and, just as in wartime, we go wherever the victims are and do whatever it takes to bring them out."

The 126th Med. Co. was called on to undertake all three types of fire-related missions this summer, when California was among the western states ravaged by widespread wild-fires. Initially called out near the end of July, the unit soon had aircraft operating throughout the state, flying from Mather Field and forward bases in several counties.

The company's participation was especially crucial this year, Spano said, because all 11 of the California Department of Forestry's UH-1 helicopters had earlier been grounded indefinitely by a serious maintenance problem. The CDF Hueys are the state's primary firefighting helicopters, and their absence was felt immediately.

"That's when the Guard stepped up to the plate," Spano said. "Guard UH-

60s and CH-47s took over the entire firefighting mission while the CDF worked to get its Hueys back on line.

"This was the first fire some of our people had gone up against," he said, "and they really liked the mission. These are people who'd done a lot while on active duty, but firefighting was entirely new to them. Everyone really did an outstanding job. It's tiring work, and the days are long, but you really know the job is important."

Help From Above

The other important state mission the 126th Med. Co. undertakes is year-round search and rescue, or SAR.

"The Air National Guard has a SAR unit based in the San Francisco Bay area but, because their HH-60 aircraft carry air-to-air refueling probes not fitted to our Black Hawks, the Air



Carrying temporary high-visibility markings, a 126th UH-60 awaits its next mission as smoke from a nearby fire swirls in the background.



Facing the Challenge

Guard concentrates on rescues at sea. We typically undertake all the land rescues," Spano said.

The 126th doesn't handle things like traffic accidents or rescues from the roofs of burning buildings, Spano said, because California has many private helicopter companies doing that work. Guard aviators get involved when it comes to highaltitude missions the civilian helicopters are unable to perform, or if all the civilian aircraft are engaged.

The 126th usually keeps two SAR aircraft on standby, Spano said, each manned by two pilots, a crew chief and a flight medic. Each UH-60 is equipped with a door-mounted rescue hoist that's used when the helicopter can't land anywhere near the rescue site. At the end of the hoist's cable is a device known as a penetrator — an anchor-shaped metal platform with small, fold-down slats that help support the flight medic and the rescued individual during the trip back up to the hovering helicopter.

The mechanics of actually getting the patient from the ground to the hovering helicopter vary, depending on the circumstances, said flight medic and medic instructor SGT Mike Feyh.

"If it's a fairly stable area with a good solid place where I can stand, I'll send the patients up and then have the crew chief send the penetrator back down for me," Feyh said. "If we're taking someone out of an unstable place — a narrow rock ledge on a hillside, for example — I'll just gather them in and bring them up with me."

Such was the case on a recent rescue in which Feyh and SSG Gary (continued on page 32)

ILOTS in the 126th Med. Co. agree that the firefighting and rescue missions they undertake are rewarding, but also concur in the belief that such missions can be among the most challenging that aviators can face.

"Flying in and near a large wildfire presents a whole range of possible hazards," said MAJ Robert A. Spano, the unit's commander. "Smoke and air turbulence are real concerns. Fires can often create their own weather, and you have to constantly be aware of your surroundings. You're mixing smoke with high temperatures, and it's usually all taking place over rugged, mountainous terrain. Plus there are usually quite a few other aircraft in the area — air tankers, other helicopters. It can get really

"When you're moving in on a fire you're doing a lot of things simultaneously," added 1LT Daniel Anderson, the 126th's training officer. "You're managing the aircraft's power; you're thinking about your routes of approach and departure; you're keeping track of where the people on the ground are; you're watching for other aircraft."

And the elevations at which many of the unit's rescues are conducted can present their own challenges.

"The Black Hawk is a great and very capable machine, and its power and lifting abilities allow us to undertake mountain rescues at altitudes that are out of reach for most other helicopters," Spano said. "But the UH-60 can run out of power, just like any other aircraft.

Secured by safety lines, SSG Gary Volkman keeps a hand on the penetrator as his UH-60 nears the scene of a simulated rescue. Sometimes we operate the aircraft right on the edge of its performance limitations, so we have to plan very carefully for variables like weight, weather conditions and fuel load."

One constant factor the 126th's aviators have to contend with, Spano said, is California's tremendously varied terrain.

"We can fly 80 miles in one direction and be on top of the highest point in the lower 48 states. Then we go 80 miles the other way and we're in the lowest spot in the Western Hemisphere," he said. "And those two points might even be part of the same mission.

"No two missions are alike," Spano added, "and you have to be ready for anything." — Steve Harding



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Volkman, the 126th's crew chief standardization instructor and Feyh's frequent flight partner, both participated. Two hikers had slid about 75 feet down a steep hillside, miraculously coming to rest on a very narrow ledge. Below the ledge was a sheer drop of several hundred feet. The rescue helicopter had to hover some 220 feet above the hikers, both to avoid the sheer face of the rock and to ensure that the rotor downwash didn't further endanger the men.

"That shelf was just barely big enough for those two guys," Volkmann said, "and there was no way to put Mike onto it. So we lowered him down to their level, and he was able to rest his knees against the ledge. Then he actually brought them onto the seat of the penetrator in the air. Once he had them hooked in, I brought them up."

Feyh said that the people he and his crewmates rescue rarely hesitate when it comes time to ride the hoist back up to a helicopter hovering high above them.

"By the time we get to them, they're so glad to see us they're more than willing to do something that in any other circumstances they'd probably flat-out refuse to try," Feyh said. "They realize that the penetrator is their only way out."

"They sometimes get a little

nervous when they reach the door of the aircraft, though," Volkmann added, "and that can actually be one of the most dangerous parts of the rescue. Their first impulse is to grab something solid, either the hoist operator or some part of the helicopter, so you have to make sure they don't grab something they shouldn't. But once we bring them in they usually heave a big sigh of relief."

And those just rescued aren't the only people in the helicopter who take a moment to reflect once the job is done.

"During the actual rescue you concentrate on the job, and the training sort of takes over," Feyh said. "But when you get back into the aircraft, it's kind of a rush to look back on what you just did. It's a pretty good feeling to know you've just pulled someone out of a dangerous or life-threatening situation."

Saints on Call

Saving lives and helping defend California against wildfires is all part of the mission for the 126th Med. Co., according to its commander.

"We're citizens of this state, too," Spano said. "We're happy to be able to help, whether fighting a wildfire or pulling an injured hiker off the top of Mount Shasta. And the fact that the firefighting, medevac and rescue missions we fly are tremendously

good training for our federal, active-duty mission is a big plus."

"This is some of the most intense and challenging flying most of us have ever done," Anderson added. "But when you put that water right on target, or you hoist somebody out of a dangerous situation, it's a feeling you just can't beat."

The Black Hawk's cockpit is a busy place during the napof-the-earth approach to the simulated rescue site.

Training the Rescuers

HE soldiers in the back of 126th Med. Co. Black Hawks during a rescue are the crew chief, who operates the rescue hoist, and the flight medic, who actually rides the hoist cable down. Both have to be very skilled at orchestrating the various parts of the complex rescue ballet. Ensuring that they are is up to SSG Gary Volkmann, the 126th's crew chief standardization instructor, and SGT Mike Feyh, a unit flight medic instructor.

"I make sure that all the trainers are teaching to the same standard," Volkmann said. "The rescue hoist is probably the biggest thing we have to stay up on, because we want our soldiers to be more than just qualified, we want them to be proficient."

Hoist training involves a ground school in which soldiers learn about the system's construction, and how to operate and maintain it. The next step is in-the-air training, during which students first operate the hoist at altitudes of between 25 and 50 feet, then

For more on the 126th Med. Co. and its operations, and on career opportunities with the unit, visit its web page at www.calguard.ca.gov/126th.



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move progressively upward to higher-altitude hoists and hoists into and out of trees.

The training is exacting, Volkman said, because it has to be.

"It takes quite a bit of time for people to get used to judging distances between the aircraft and the ground, for example," he said. "And that's obviously important when you have a medic sitting on the end of that hoist line and you're sending him down too fast — it will definitely hurt if he hits the ground too hard. Operating the hoist is really an art."

The soldiers who ride down that hoist line — the flight medics — also have a variety of skills. They must, of course, first acquire the necessary range of medical knowledge.

"Flight medics must first go through the normal 91B Army medic training," Feyh said. "Then, we require that flight medics must be qualified emergency medical technicians and that they attend the flight medic course at Fort Rucker, Ala."

The medics encounter a wide range of injuries, Feyh said, everything from scrapes and bruises to massive trauma and altitude sickness.

"Fortunately, most of the 126th's medics work as paramedics for fire departments or commercial ambulance companies," he said. "So the guys out there doing the rescues actually have a higher level of medical training than medics in active-duty units."

"No two missions are ever the same," Volkmann said, "either in the injuries or the circumstances we have to deal with.'

One fairly common factor, though, is altitude. The 126th is often called on to undertake rescues on Mount Shasta and other peaks.

"That's because the Black Hawk can perform well at those altitudes, and because most civilian helicopters don't have



As the helicopter hovers 150 feet above the simulated rescue site, SSG Gary Volkmann (right) prepares to bring flight medic SSG Mike Feyh back aboard.

rescue hoists," Volkmann said. "So just rescues, Feyh said, the aircraft will drop the about any mission above 10,000 feet is ours.'

Though 10,000 feet usually marks the altitude at which air crews must don oxygen masks, the rescue crews are cleared to work without oxygen for up to an hour at that elevation. On most of the higher-altitude medic at the site and wait at a lower altitude until summoned by the medic.

"This job can certainly throw some interesting challenges at you," Volkmann said. "But good training, motivation and pride in what we do go a long way toward overcoming the obstacles." — Steve Harding

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